

**Notice of Allowability**

Application No.

10/622,923

Examiner

Suchin Parihar

Applicant(s)

BAECKLER ET AL.

Art Unit

2825

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 9/27/2007.
2. ☒ The allowed claim(s) is/are 2,3,5-13 and 15-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application
- ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
- ☐ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other \_\_\_\_\_

PAUL DINH  
PRIMARY EXAMINER

*Paul Dinh*

## DETAILED ACTION

### *Reasons For Allowance*

1. The following is an examiner's statement of reasons for allowance:

Claims 2-3, 5-13 and 15-22 are allowed because the prior art made of record does not teach or suggest a method/computer-program-product for combining lookup tables (LUTs) in a design for a programmable integrated circuit in the manner as recited in the claims.

2. With respect to claims 2-3 and 7-13, the prior art fails to teach the combination of steps in claim 2 including the following particular steps as recited in claim 2:

arranging an order of input signals of one of the LUTs so that each of the common input signals is applied to a corresponding input terminal in both of the LUTs to provide a first arranged order of input signals;

wherein the method determines whether the LUTs implement the same function based on the first arranged order of the input signals.

3. With respect to claims 5-6, the prior art fails to teach the combination of steps in claim 5 including the following particular steps as recited in claim 5:

If the LUTs implement the same function with the first rearranged order, combining the masks of the LUTs into a shared LUT mask in the design;

If the LUTs do not implement the same function with the first rearranged order, rearranging the order of at least two input signals of the first LUT with respect to the input terminals of the first LUT to provide a second rearranged order.

4. With respect to claims 15-22, the prior art fails to teach the combination of steps in claim 20 including the following particular steps as recited in claim 20:

code for determining if the LUTs have no more than M unique input signals;  
wherein implementation of the code for comparing the output values of the first and second LUTs is prevented if the first and second LUTs have less than N common input signals or more than M unique input signals.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suchin Parihar whose telephone number is 571-272-6210. The examiner can normally be reached on Mon-Fri, 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

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Customer Service Representative or access to the automated information system, call  
800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PAUL DINH  
PRIMARY EXAMINER

*Paul Dinh*

  
Suchin Parihar  
Examiner  
AU 2825